

Electrical capacitors are also called as super capacitors.

Capacitors are energy storing devices that are similar to batteries. Batteries release their energy at a slow pace. Capacitors are used when a high burst of energy is required. Due to this particular trait, capacitors have found large use in many aspects.

Electrical capacitors work on the principle of ion absorption and desorption. These contain an electrolyte with the electrodes that are immersed in it.

Thus an electrical charge is formed and a electric double layer is created due to the electrolyte and the electrodes. Hence, these are also known as electric double layer capacitors(EDLC). This principle is responsible for the charging and the discharging of the EDLC. **Electrical capacitors** are used in applications related to power back-up or even memory back-ups.

Whereas, Film capacitors are recognised by the use of plastic film used as dielectric. The plastic sheet used may be coated or uncoated depending on the use of that particular capacitor. The electrodes are then added to this and then the entire compilation is placed in a cylinder or a case. There are several types of film capacitors. The differentiating factor between these is the dielectric medium used. Thus the types are polystyrene film, polypropylene film, metallised Film capacitors offer great performance with high insulation rate at a stable temperature. Thus the effective loss is very low. If the voltage needs to be very high, then capacitors with a thicker film are selected. If the standardized version is not suitable then in some cases the engineers can provide a customised product with a specific design and higher inductance and flexibility according to customers' demands. Film capacitors are mainly used in voltage detectors, TV sets, and even in some motors.

As their name suggests very powerful Power film capacitors are made to survive really demanding conditions like high pulse current, high voltage and current. These are high performance capacitors that are designed carefully according to their specific function. The shelf life of a power film capacitor depends on the temperature and the voltage range. Those have a wide use and are used in different applications throughout the industry. In some cases, higher degree of capacitance and voltage is required especially in devices with high frequency switches. The **power film capacitors** can be used in electronics with high speed, pulse applications and also in DC filtering.

Low Inductance Capacitors have a different geometric structure. The terminals are present on the longer side of the capacitor case, as compared to the other general capacitors which have terminals on the shorter side. This structural difference results in a smaller electrical loop as the terminals are comparatively close to each other. The design of the entire assembly, thus changes and becomes simpler and much stable. This peculiar characteristic gives it the name reverse geometry capacitors. **Low inductance capacitors** are mostly used in monitors, army intelligence systems, medical and x-ray devices and even in video and image processing devices.

About Us:

For more information on <u>film capacitor</u>, <u>electrical capacitor</u>, low inductance capacitors, power film capacitors. Please visit at www.alconelectronics.com